

## **EXHIBIT 19**



US005613004A

United States Patent

[19]

[11] Patent Number: 5,613,004

Cooperman et al.

[45] Date of Patent: Mar. 18, 1997

- [54] STEGANOGRAPHIC METHOD AND DEVICE
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- [21] Appl. No.: 489,172
- [22] Filed: Jun. 7, 1995
- [51] Int. Cl.<sup>6</sup> ..... H04L 9/20
- [52] U.S. Cl. .... 380/28; 380/4
- [58] Field of Search ..... 380/4, 25, 28

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[57] ABSTRACT

An apparatus and method for encoding and decoding additional information into a stream of digitized samples in an integral manner. The information is encoded using special keys. The information is contained in the samples, not prepended or appended to the sample stream. The method makes it extremely difficult to find the information in the samples if the proper keys are not possessed by the decoder. The method does not cause a significant degradation to the sample stream. The method is used to establish ownership of copyrighted digital multimedia content and provide a disincentive to piracy of such material.

44 Claims, No Drawings